Section 5 Replacements

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IMPORTANT !!!

1. AFTER A HARDWARE MODIFICATION REBOOT WITH: BOOT -R

2. SUN ULTRASPARC

2.1. MOTHER BOARD

Step	Action	Refer to	Remark
1	Replace the mother board	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements Chapter: Mother board and Component replacement	Disconnect all connectors and remove PCI cards, UPA cards, DIMM's, NVRAM, etc.

Table 1:

2.2. NVRAM

Step	Action	Refer to	Remark
1	Replace NVRAM	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements Chapter: Mother board and Component replacement	Replacing the NVRAM (new hostid) will require a new software license file
2	Re-install OS and AS	Manual: Release Bulletin Chapter: Software installation	The correct NVRAM settings for EasyVision will be installed
3	- Reload backup files (if not present in /dbadmin) - Rename: `<hostid>.cus` file	Manual: Release Bulletin Chapter: Appendix File Transfer	Backup files are: `license.dat` (License file) `config.cfg` (Configuration file) `<hostid>.cus` (Customization file) `<host_name>.cal` (HCU Calibration file) Rename: `<old_hostid>.cus` to `<new_hostid>.cus`
4	- Adapt EasyVision configuration panel - Execute config	Manual: Release Bulletin Chapter: Configuring Paragraph: Execute the configuration	In EasyVision configuration panel : change hostid to `<new_hostid>` **Do not change** 'image database identification' otherwise the image database will be lost !!!

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2.3. MEMORY

Step	Action	Refer to	Remark
1	Replace the DIMM	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements Chapter: Mother board and Component replacement	

Table 3:

2.4. SYSTEM DISK

Step	Action	Refer to	Remark
1	Remove the system disk	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements Chapter: Storage Devices	
2	Replace the system disk	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements Chapter: Storage Devices	No jumper settings are required. The SCSI address is related to the backpanel slot.
3	Re-install OS and AS	Manual: Release Bulletin Chapter: Software installation	
4	Reload backup files (if not present in /dbadmin)	Manual: Release Bulletin Chapter: Appendix File Transfer	Backup files are: `license.dat` (License file) `config.cfg` (Configuration file) `<hostid>.cus` (Customization file) `<host_name>.cal` (HCU Calibration file)
5	Execute config	Manual: Release Bulletin Chapter: Configuring Paragraph: Execute the configuration	

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2.5. CD-ROM

Step	Action	Refer to	Remark
1	Remove the CD-ROM player	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements Chapter: Storage Devices	
2	Set jumpers on new CD-ROM player	Manual: System Manual EasyVision Section: Programmings	Ultra 60: SCSI CDROM Ultra 5/10: EIDE CDROM
3	Replace the CD-ROM	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements Chapter: Storage Devices	

Table 5:

2.6. PCI CARDS

Step	Action	Refer to	Remark
1	Remove the PCI card	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements Chapter: Mother board and Component replacement	
2	Set jumpers	Manual: System Manual EasyVision Section: Programmings	Not all PCI cards have jumper settings.
3	Replace the PCI card	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements Chapter: Mother board and Component replacement	

Table 6:

2.7. POWER SUPPLY

Step	Action	Refer to	Remark
1	Replace the Power Supply	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements Chapter: Major subassemblies / Power Supply	

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2.8. VARIOUS ULTRA 5/10/60 PARTS

Step	Action	Refer to	Remark
1	Remove various Ultra 5/10 or 60 parts	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements	
2	Replace various Ultra 5/10 or 60 parts	Manual: UNIT Manual Ultra 5/10 or 60 Section: Replacements	

Table 8:

3. PERIPHERAL CABINET

3.1. IMAGE DISK

For additional image disks see chapter 5 (Image disks).

Step	Action	Refer to	Remark
1	Remove the Image Disk	Manual: System Manual EasyVision Section: Installation Chapter: Peripheral Cabinets	Database will be lost ! Procedure not described. Use your imagination.
2	Set jumpers on new Image Disk	Manual: System Manual EasyVision Section: Programmings	
3	Replace the Image Disk	Manual: System Manual EasyVision Section: Installation Chapter: Peripheral Cabinets	Mount disk in peripheral cabinet.
4	Boot CDROM and Reformat Image Disk	Manual: Release Bulletin Chapter: Installation Paragraph: Software Installation	Format only Image Disk. Choose 2 in OS Install Menu!
6	Execute config	Manual: Release Bulletin Chapter: Configuring … Paragraph: Execute the configuration	New empty database is created

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3.2. EASYSTORE OPTICAL DISK DRIVE

Step	Action	Refer to	Remark
1	Remove the Storage Drive	Manual: System Manual EasyVision Section: Installation Chapter: Peripheral Cabinets	Procedure not described. Use your imagination.
2	Set jumpers on new Storage Drive	Manual: System Manual EasyVision Section: Programmings	
3	Replace the Storage Drive	Manual: System Manual EasyVision Section: Installation Chapter: Peripheral Cabinets	Mount disk in peripheral cabinet.

Table 10:

3.3. EASYSTORE RECORDABLE

Step	Action	Refer to	Remark
1	Remove the CD-R Drive	Manual: System Manual EasyVision Section: Installation Chapter: Peripheral Cabinets	Procedure not described. Use your imagination
2	Set jumpers on new CD-R Drive	Manual: System Manual EasyVision Section: Programmings	New CD-R Drive has same SCSI settings as defect CD-R Drive
3	Replace the CD-R Drive	Manual: System Manual EasyVision Section: Replacements Chapter: CD-R Drive	Mount disk in peripheral cabinet

Table 11:

3.4. POWER SUPPLY

Step	Action	Refer to	Remark
1	Remove all scsi devices from the defective Peripheral cabinet, including scsi cables.	Manual: System Manual EasyVision Section: Installation Chapter: Peripheral Cabinets	Power supply is not a FRU. Replace complete Peripheral Cabinet
2	Replace all devices in new Peripheral Cabinet Re-install scsi cables	Manual: System Manual EasyVision Section: Installation Chapter: Peripheral Cabinets	

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4. MONITOR

Step	Action	Refer to	Remark
1	Replace Monitor		A monitor is a Field Replaceable Unit
2	Adjust Monitor	Manual: System Manual EasyVision Section: Adjustments	Monitor adjustments are done with the Monitor Maintenance Kit

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5. IMAGE DISKS

- Set all jumpers correctly (Manual: System Manual EasyVision, Section: Programmings).
- Mount the disk drive into the Peripheral Cabinet
- Connect SCSI cable + power cable to the drive.
- Close the Peripheral Cabinet, connect SCSI cable, SCSI Terminator and power cable.
- Switch-on the system.
- Interrupt the selftest procedure during the message:

  *testing ***** megs of memory. Still to go....*

by pressing **Stop/A** (at the same time)
The system reponds with the ok prompt.

- Put the CD-ROM with the Operating System & Application Software on the tray of the CD-ROM drive, close the door and wait about 5 seconds until the drive is ready.
- Boot from CD_ROM: ok **boot cdrom**
  The booting procedure takes about 9 minutes. Warning: during reading of the CD-ROM warnings and recoverable errors are shown on the screen. Only when the errors persist for a long time, the CD-ROM may well be damaged and you may need to order another CD-ROM.
- The following entry will be prompted on the screen:

OS Install Menu:

What do you want to do?:
1 Install OS
2 Reformat disks
3 Login as root

0 Shutdown

*Enter the number of your choice: **2***

Starting
*Password: **password***

- At the question "Enter your choices now:" answer **P** to partition for the Disk(s). Formatting the disk(s) is not necessary.
- When finished formatting/partitioning you will return to the OS Install Menu. Select: 0 Shutdown
- Eject the CD-ROM and boot normally: ok `boot`
- Select '1. Start Configuration' in Config Menu and enter password.
- Execute the configuration.
- EasyVision will automatically re-boot.

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6. DOME MD2 FRAMEBUFFER

6.1. DOME GREYSCALE BUFFER ULTRA 5/10

To install a DOME GreyScale FRAMEBUFFER in an Ultra 5 or 10 the following procedure must be done:

NOTE

It is assumed that NO…… PCI PGX(s) or UPA TRUE COLOR (Ultra-10 Only) are installed.

Stop the application and shut down the system in a proper way.
Power-ON the system
At memory test of the SUN Press Stop-A

```
Ok
```

Type:

```
nvalias md2 pci@1f,0/pci@1/DOME,Md2PCI
nvstore
setenv output-device md2
reset
```

Connect the video cable to the DOME FRAMEBUFFER board. The first FRAMEBUFFER channel always has the DOME logo displayed. Start the configuration and edit the EasyVision “Framebuffer / Monitor settings”. Select automatic configuration and leave this panel. Execute the configuration.

If the DOME FRAMEBUFFER is removed and the Onboard frame buffer is used, the next sequence of instructions must be executed:

Stop the application and shut the system down in a proper way.
Power-ON
At memory test of the SUN Press Stop-A

```
Ok
setenv output-device screen
reset
```

Connect the video cable to the Onboard FRAMEBUFFER (the first frame buffer is the first VGA connector, which is located next to the fixating bolt). Start the configuration and edit the EasyVision “Framebuffer / Monitor settings”. Select automatic configuration (the PGX onboard frame buffer should be selected) and leave this panel. Execute the configuration.

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6.2. ULTRA 60

To install a DOME GreyScale FRAMEBUFFER in an Ultra 60 the next procedure must be done:

Stop the application and shut the system down in a proper way.
Remove the UPA TRUE COLOR FRAME BUFFER(s) and install the DOME GreyScale FRAMEBUFFER. Connect the video cable to the DOME frame buffer board. The first frame buffer channel always has the DOME logo displayed (the first frame buffer is the first VGA connector, which is located next to the fixating bolt). Start the configuration and edit the EasyVision “Framebuffer / Monitor settings”. Select automatic configuration (the DOME FRAMEBUFFER should be selected) and leave this panel. Execute the configuration.

If the DOME frame buffer is removed and a UPA TRUE COLOR FRAMEBUFFER is used, the next sequence of instructions must be executed:

Stop the application and shut the system down in a proper way.
Remove the DOME GreyScale FRAMEBUFFER and install the UPA TRUE COLOR FRAMEBUFFER(s). Connect the video cable to the UPA TRUE COLOR FRAMEBUFFER. Start the configuration and edit the EasyVision “Framebuffer / Monitor settings”. Select automatic configuration and leave this panel. Execute the configuration.

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